



# ***Project Science Office Update***

- **MTPE status & recent events**
- **Budget status**
- **Near-term goals, requirements, and schedules**



## ***MTPE Status***

- **TRW Space & Electronics resumed work on the common spacecraft contract following rejection of protests by the GAO**
  - **PM-1 spacecraft now proceeding towards a December 2000 launch**
  - **Chemistry-1 implementation on the common spacecraft being assessed by NASA and, on May 15, the Payload Panel**
- **NASA budget for FY96 signed by President Clinton**
  - **\$535.3 M for EOS flights**
  - **\$241.2 M for EOSDIS**
  - **\$248.2 M for Science (includes IDS and R&A budgets)**
- **FY97 budget submitted to Congress on March 19**
  - **Hearings now being held by House and Senate**
  - **Sensitivity to large amount of “uncosted carryover” by MTPE**



## ***Recent Congressional “Action”***

- **Committee on Science (House of Representatives)**
  - **Sheila Jackson Lee (D-TX) proposed directing NASA to implement NAS recommendations on MTPE (defeated)**
  - **Joe Barton (R-TX) proposed renaming NSF the National Science and Engineering Foundation (passed)**
  - **Tim Roemer (D-IN) proposed eliminating the International Space Station Alpha (defeated)**
  - **Dana Rohrabacher (R-CA) stated that funding climate change research is like “pouring money down a rathole”**
  - **Proposed reducing the President’s request for MTPE (\$1.4 B) by \$374 M (27% decrease)**
  - **Proposed eliminating EPA’s climate change research program, and further reducing NOAA’s budget that supports the USGCRP**



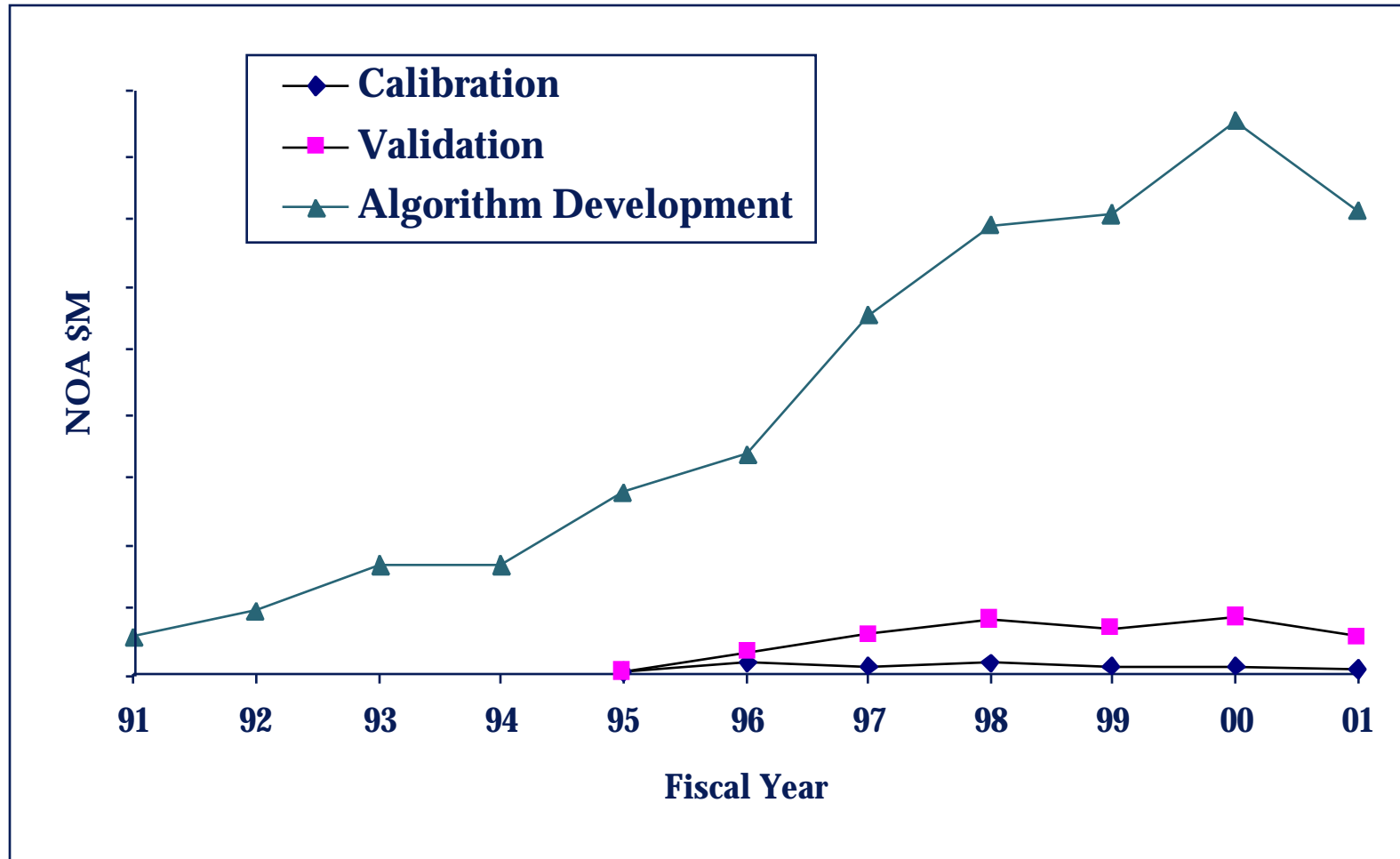
## ***MTPE FY97 Request (\$M)***

	<b><i>FY95</i></b>	<b><i>FY96</i></b>	<b><i>FY97</i></b>
EOS Flight	574.1	535.3	585.7
EOSDIS	220.6	241.2	261.1
Earth Probes	101.1	46.0	47.1
MTPE Science	254.4	248.2	277.1*
Operations, Data Retrieval & Storage	107.5	89.6	102.0
Other (GLOBE, ACTS)	7.3	5.0	5.0
Construction of Facilities	17.0	17.0	
Launch Services	62.2	107.1	124.1
<b><i>Total</i></b>	<b><i>1344.2</i></b>	<b><i>1289.4</i></b>	<b><i>1402.1</i></b>

***\*Includes \$50 M for a data purchase***



# EOS Science Funding





## ***Issues & Concerns***

- **NASA continues to experience budget pressures**
  - **uncosted carry-over a continuous problem that leads to guidelines to further reduce budgets**
  - **aircraft program uncertainty adds to dilemma on long-range planning for validation program**
    - » **in FY96, flight time was ~\$500 per flight hour (ER-2)**
    - » **in FY97, there will be no “subsidized” flight hours available, so investigators must budget according to “full cost” of flight hours (\$3500 per flight hour for the ER-2)**
- **Vital to have a concrete work plan to support contract, including deliverables, schedules, expectations, technical reports, financial reports, software delivery, ATBDs, validation plans, etc.**
  - **Need metrics and records to sustain budget and demonstrate good value for dollars dispersed**



# ***ATBD Review***

- **First review of ATBDs for AM-1, LIS, and SeaWinds held May 1994**
  - All MODIS, ASTER, CERES, LIS, MISR, and MOPITT ATBDs are available on-line (in pdf and native formats)
  - SeaWinds ATBD still missing
- **Some teams have not yet developed ATBDs, and need to write their first algorithm documents**
  - AIRS, ACRIM, AMSR, Data Assimilation, SAGE III
    - » Tentative schedule—November 15, 1996 (ATBD due to PSO)
- **Teams from first round (including MODIS) need to update their ATBDs as indicated in post-review letters of 1994**
  - SWAMP debated this subject and concluded that sooner, rather than later, would be preferable to have a positive influence on algorithm development
    - » Tentative schedule—August 16, 1996 (ATBD due to PSO)



# ***Atmospheres Group Summary***

- **Algorithm code delivery schedule and level 3 data products (Hucek)**
  - Need one NCEP ancillary data product effort for all of MODIS science team (Gumley  $\Rightarrow$  SDST desired)
  - 8- or 10-day temporal composite? Group favors 8-day composite cumulated from first of year
  - 1 month composite also made from individual days, not aggregated from 8-day composites
  - Need agreement among disciplines on MODIS as well as awareness of external community
- **Reviewed software delivery schedule**
  - level 3 algorithms due September 1!
- **Revised ATBD delivery on August 16 no problem**
- **Upcoming meeting**
  - **Discipline meeting scheduled for July 17-18 (Chincoteague)**





# ***Atmospheres Summary (continued)***

- **Upcoming meeting (continued)**
  - Long-term schedule, create 5-year work plan, update validation plan, begin to formulate QA plan, summarize changes to ATBDs, integrate Bo-Cai Gao into group algorithms, examine temperature & moisture sounding strategy, focus on level-3 algorithm development
- **Presentation on CERES cloud algorithm integration (Baum)**
  - Lessons learned on timing, integration, toolkits, etc.
- **Validation opportunities in Australia (Lynch)**
  - SST (warm current west of Perth), cirrus detection and heights (lidar), sunphotometer network (Alice Springs, etc.), access to clean Indian Ocean environment, Australian land mass with variable climate regimes, and turbid and humid tropics (Java and Manus)



# ***Atmospheres Summary (continued)***

- **Workshops**
  - **Aerosol Workshop (April 15-19) excellent**
  - **Cloud Workshop (next May) to be developed along same format**
    - » **Steve Ackerman, Teruyuki Nakajima, and Michael King (organizing committee)**
- **Level-3 developer**
  - **Resumés in hand, selection to occur in May**